

A NEW NEARCTIC SPECIES OF *EXOTELEIA* WALLENGREN (GELECHIIDAE) ON PINE

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During the past few years various officers of the Canadian Forest Insect Survey have been studying the *Exoteleia* species on pine. One of these, a new species, is described here to enable Mr. O. H. Lindquist, Forest Insect Laboratory, Sault Ste. Marie, Ontario, to deal with its life history in a companion paper that follows.

Exoteleia nepheos Freeman, new species

Exoteleia sp. Freeman, 1960, Can. Ent. Suppl. 16: 24, fig. 14.

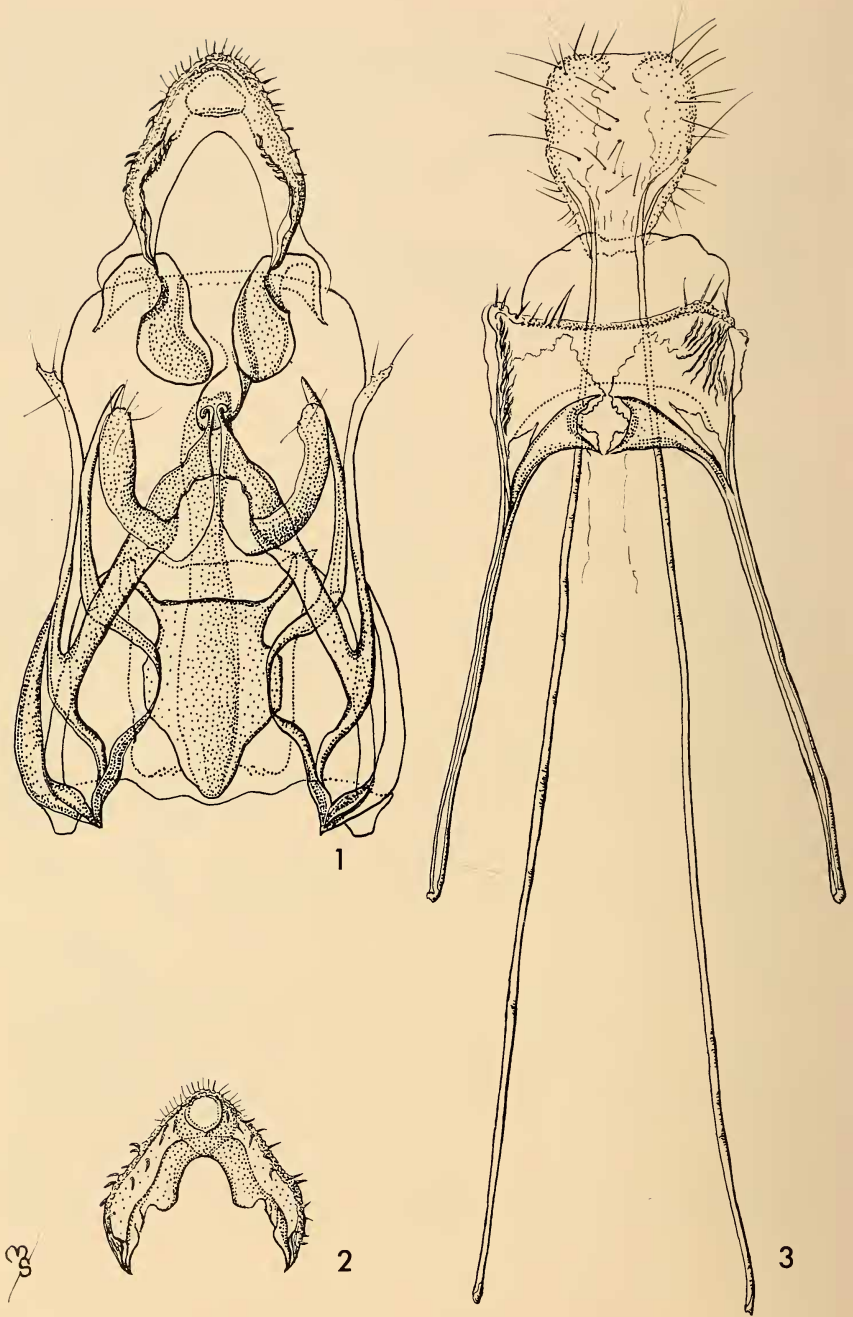
Colour.—Antenna with alternating black and whitish bands. Palpus with black and pearl-white bands. Head, thorax and patagium shiny steel-grey. Forewing golden brown with three greyish and white granular transverse fasciae; extreme base greyish, granular, extending narrowly along costal and anal regions; first fascia at basal third, margined inwardly with scattered white scales intermixed with black scales below fold; second fascia similarly marked but in addition containing a black spot outwardly below fold; third fascia at apical four-fifths, white; costal, apical, and trailing edges greyish; fringe dark grey. Hindwing blackish; fringe dark grey. Legs with black and white bands. Abdomen purplish black.

Wingspread.—9–11 mm.

Male genitalia (Fig. 1).—Very close to those of *E. pinifoliella* Chambers (Fig. 2). Uncus subconical; inner chitinous margin arcuate, not angular as in *pinifoliella*. Gnathos a central, broad, hook-like process with two basal lobes. Clasper with bulbous base and tapered apex. Vinculum complex; two lateral, narrow, membranous processes; two curved sicae; two subtriangular plates with knob-like apices. Aedeagus tubular.

Female genitalia (Fig. 3).—Anterior apophyses short, stout. Posterior apophyses long, narrow. Ostium semicircular; V-shaped in *pinifoliella*.

Holotype, male, Port Burwell, Ontario, 12 July 1961, Forest Insect Survey No. S61-3537-01. Reared from *Pinus resinosa* Ait.; No. 9166 in the Canadian National Collection, Ottawa, Ontario. Paratypes: six ♂♂, five ♀♀, Port Burwell, Ontario, 24 June–5 August 1961, same rearing as holotype; one ♂, Bright (Lake Huron), Ontario, 24 June 1964, Forest Insect Survey No. S64-0788-01 (*Pinus resinosa*); one ♀, Elmira, Ontario, 3 August 1960, Forest Insect Survey (*Pinus resinosa*); two ♂♂, five ♀♀, Ottawa, Ontario, 12 June–6 July 1950, Forest Insect Survey No. 050-400 (*Pinus Mugho* Turra); one ♀, Ottawa, Ontario, 8 June 1951, Forest Insect Survey No. 051-349 (*Pinus Mugho*); one ♂, Harrow, Ontario, 27 June 1961, Forest Insect Survey No. S61-1206-01 (*Pinus sylvestris* L.); one ♀, Port Burwell, Ontario, 31 July 1961, Forest Insect Survey No. S61-3575-02 (*Pinus sylvestris*); one ♂, one ♀, Lake Co., Ohio, 15 June 1960, J. F. Woolton (*Pinus sylvestris*).



Figs. 1-3. Genitalia of *Exoteleia* species. 1, male of *E. nepheos*; 2, male uncus of *E. pinifoliella*; 3, female of *E. nepheos*.

Flight period.—Late June to early August.

Remarks.—This species is closely allied to *E. pinifoliella* Chambers and *E. chillcotti* Freeman, but it is much darker than these two and has different genitalia. Although it was taken at the Central Experimental Farm at Ottawa in 1950 and 1951, it has not been found in the area since that time. Its presence in southernmost Ontario and directly across Lake Erie in Lake County, Ohio, suggests that it is an introduced species. However, I am unable to find an applicable name in the literature.

IDENTITY OF *CERATONYX SATANARIA*, AND THE LARVA AND PUPA OF *C. ARIZONENSIS* (GEOMETRIDAE, ENNOMINAE)

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In the late summer of 1959, the larvae of a geometrid were found feeding on a small sunflower-like composite (*Viguiera multiflora* (Nutt.) Blake) in Madera Canyon, Santa Rita Mountains, Arizona. The larvae were remarkable in that each possessed a pair of stout filaments on the prothoracic segment and a single, shorter one on the eighth abdominal segment. They immediately called to mind the figure of the larva of *Ceratonyx satanaria* Guenée, 1857. I was confident that once I had the adult, I would be on the way to solving the identity of the then unrecognized Guenée species and also the position of the genus. The moths emerged during the following year, 1960, in Madera Canyon; they proved to be *Stenocharis arizonensis* Capps, 1950.

In the fall of 1961, a visit was made to Harvard University to study manuscript Abbot plates in the Houghton Library. It was from one such plate that Guenée described *Ceratonyx satanaria*. In one of the sets, that which had formerly been the property of the Boston Society of Natural History and which the Society had purchased from Dr. Oemler of Georgia, the plate numbered 157 was obviously a duplicate of the one that had served as a basis for the figure of the larva and for the description of the moth. The moth figured was without any question congeneric with the species at present placed in *Stenocharis*, in fact very similar to *S. permagnaria* Grossbeck, 1912.

During February of 1961, Mrs. William Hills of Pensacola, Florida took two specimens of a geometrid that proved to be *Ceratonyx satanaria*. Although the course of the lines does not quite match that as shown in the